Quick Reference Guide
Watson for Drug Discovery

Overview

IBM Watson for Drug Discovery is a cloud-based cognitive platform that enables researchers to validate their current hypotheses and discover new drug targets through literature to ensure confidence in their drug discovery programs.

Using proven AI-powered analytics, researchers are able to process millions of literature sources more efficiently while maintaining a clear view into the source data for trust in the new insights.

Target Audience

- **Users include drug researchers who are tasked with researching disease pathways to uncover potential targets onto which new lead candidates can be designed.**

- Target accounts include small-through-large pharma, biotech, and academic institutions currently involved with early R&D activities – specifically **Target Identification, Lead Identification, and/or Lead Optimizations**

Benefits

- Relationship networks between biological concepts are quickly constructed from literature, and presented in easy-to-digest visualizations that allow the researcher to click to the source data and annotations used to construct each connections

- AI-driven, predictive analytics look beyond simple co-occurrence of two concepts within a document to infer relationships across the corpus of data to generate novel insights

- Prioritized, ranked lists of potential targets are generated and supported statistically to allow the researcher to progress promising leads

Value Proposition

- Watson for Drug Discovery enables researchers to quickly generate and validate hypotheses from a vast corpus a data to take promising new targets for further development.

- Time is saved on searching, reading, digesting, and collating the thousands of potentially relevant literature sources as compared to manual methods.

- Validating of target insights through WDD can reduce costs on downstream development effort by focusing on targets with the most evidence support.

Pain Points

- 25+ million current publications, with thousands being added each year

- Complex biological concepts and systems make manual search, digestion, and collation of available literature VERY time intensive, and prone to error.

- Simple, single-target therapies are no longer as prevalent – complex multi-target, large molecule, or biologic therapies are becoming the norm

- Downstream (wet lab) validation for potential targets is expensive and laborious

Key Questions

- How much time do you, or your team, typically spend reading publications and literature as part of your drug discovery program?

- How many programs are you currently running in parallel (larger organizations)? Has this increased in recent years?

- What do your current timelines look like with your research programs? Have they been shrinking?

- How are you, or your team, measured by your organization? Is it tied to the success rates for the targets that you present?

Objection Handling

- **How is this product different from other, free search tools (e.g., Google Scholar)?**
- WDD is able to understand and search for biological concepts, not just return a basic keyword search. It also infers networks of relationships for concepts based on how they are discussed in the literature

- **How can we trust the insights from WDD when there is also bad data being published?**
- First, WDD relies upon independent verification through multiple publications (a single publication would receive a low confidence). Second, WDD evaluates over consistency of both literal and predicted relationship in assigning confidence.

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Client References

- **Barrow Neurological Institute**: Applied WDD to identify 5 novel RNA-binding proteins altered in ALS.
  Read the Case Study

- **Pfizer**: Utilized a custom instance of WDD to better understand drug toxicity and safety in their immuno-oncology research.
  Read the Article

- **University Health Network**: Uncovered opportunities to repurpose existing drugs for use with Parkinson's Disease.
  Read the Research Paper

Average Deal Size/Pricing

Subscriptions (12-month)

- Standard License – $20,400
- Academic License - $5,000
- Extended Instance – Contact IBM for more information on custom instances

Services

- High-Touch SaaS – $30,000
- Jump Start Services - $37,000
- Due Diligence Services - $45,000

Brand Offering & Platforms

- IBM Watson for Drug Discovery

- IBM Watson for Drug Discovery Marketplace Page

- IBM Watson Health Life Science Solutions

Additional Information

Most supported therapeutic areas:

- Neurology
- Oncology
- Immuno-oncology
- Cardiovascular

Note: WDD was not designed to support specific therapeutic areas, but we have the most documented success for the areas listed above from our existing customers.

Competitive Differentiators

Key Competitors

- Linguamatics

- Clarivate Analytics Life Science Suite: Integrity; Drug Research Advisor; MetaCore; Key Pathway Advisor

- Benevolent AI

Top Reasons IBM Wins

- WDD has numerous peer-reviewed publications supporting the effectiveness of our AI analytics and applicability to the drug research space
- IBM has deep domain expertise in AI technologies and experience applying it to different industry needs, unlike many of our competitors
- WDD is transparent about our product, features and pricing so the customer knows exactly they are getting

Key Contacts

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